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A strategy of development based on innovation

The case of the Petzl Company in Isere, France¹

Pierre-Olaf Schut

EDITOR'S NOTE

Translation: Jeanne Schut

- ¹ Petzl is a family business created in 1975, in the wake of the craft activity of Fernand Petzl, a pioneer of alpine caving. Initially specialized in material dedicated to the practice of speleology, Petzl has expanded its business to other mountain sports and outdoor recreation. Analyzing its history means taking a look at economic questions related to the development of an industrial company which keeps growing regularly until it becomes a small and middle-size but international company.
- ² Our hypothesis is the following: Paul Petzl launched a growth dynamics which he managed to perpetuate, especially thanks to the cultivation of traditional values inherited from his father's company : independence, quality, innovation. According to F. Cognie and F. Aballéa (2010), craft industry is an exemplary model in entrepreneurship because it is based on a proximity which structures the company organization and the service relationship offered to its customers. This closeness spreads out at every level, favouring the development of the know-how and the quality of the work until it gains its customers' trust. It also makes innovation possible through the development of new solutions adapted to the evolutions of the needs. Finally, the fact that the company was born from its close link with speleology and the corporate culture built around Fernand Petzl's fame as a member of mediatised caving explorations adds up to make a relevant whole from an economic point of view. Later, when the company grows and structurally moves away from the ideal-typical craftsman model, its manager, Paul Petzl protects its fundamental values to enjoy a lasting stability. In fine, through Paul Petzl's

entrepreneurial course, this article aims at demonstrating how a man can ensure his company sustainability supported by the values of the original family business – especially in its permanent search for innovations – and make relevant management choices.

- 3 The present study relies on several sources. First, an interview with Paul Petzl, the managing director which allowed us to recount his vision of the company and the choices made by the management. We have also mobilized documents provided by the company: articles listed in distributors' catalogues² and advertisements published in specialist magazines³. To have a better view of the import of the manager's comments, we had further conversations (fully listed in the appendix) with key actors in the company professional environment. Finally, the impossibility to have access to the company archives was partially compensated by a close study of specialist publications, minutes from the Commercial court⁴, and the database of the INPI (French national institute of industrial property) to gather administrative information relative to registered patents and economic statistics. The data were compared with those of the sector and then sorted again through the archives of the Federation of Industrialists and Manufacturers of Sporting goods (FIFAS).
- 4 The results of these analyses are presented in three phases: first, the construction of a value system stemming from the family business model; second, the company growth dynamics stimulated by opportunities of diversification connected to the development of sports practices and motivated by the desire or the necessity to innovate; and finally, the management choices imposed by the company development and the evolution of the economic organization in the sector. Thus, through a case study, this monograph opens up to a reflection on the management and strategy of an industrial company and on how the evolution of practices influences product manufacturers.

Launching the company: a legacy from Fernand Petzl, the speleologist

Fernand Petzl, a speleologist and craftsman

- 5 Petzl is a family business. To understand how it came about, we have to be aware of the culture and values Fernand Petzl passed on to his sons. In 1930, when Fernand Petzl (1913-2003) starts his speleology activities, he also unknowingly starts the company history. He became famous for his underground exploration of the Dent de Crolles and later of the Berger abyss (Schut, 2005). He assists Pierre Chevallier, an engineer with whom he shares caving and technical knowledge and proves to be a smart and efficient designer. But the speleologist's fame strangely contrasts his "ordinary" professional life as a craftsman. Trained as a cabinetmaker, he works for himself as a modeller. Attached to his own independence, he is famous for his ingenuity which helps him find simple and effective solutions. His professional skills are soon requested for the production of specific tools needed for underground explorations. In 1968, Bruno Dressler, a member of the Seine Speleo-club and a creative engineer, asks him to produce several parts he has designed (Dressler and Minvielle, 1979): descender, pulley and brake handle⁵. This is how the production of speleology products started.

- 6 Marketing is made directly with the users, during speleology congresses or through the courses offered by the French Federation of Speleology. Fernand Petzl's reputation also leads him to sell his products to foreign speleologists. The fact that speleologists constitute a close-knit community, both among inventors and among French and foreign followers, gives Fernand Petzl the opportunity to start a fortuitous additional activity.

Emergence of the speleology market and creation of the Petzl company

- 7 Concerned about his children's future, Fernand Petzl wishes to pass his business onto them. Pierre, his elder son, joins him in the workshop and so does his younger son, Paul, a little later. Having both received an education and training in mechanical engineering, they begin to make speleology equipment in their father's workshop. Within the family company, Fernand Petzl also passes on his values to his sons: first and foremost, work! Manufacturing these parts is very demanding, both physically and morally as the quality criteria are high. Because Fernand Petzl had been a team leader for speleologists during difficult underground explorations, and also because he is still engaged in speleological rescue, he is very much aware of the vital importance of the quality the equipment must have to resist the most severe tensions in a difficult environment. Quality in design and production is a constant concern for the conscientious and responsible craftsman. Moreover Fernand Petzl is animated by a taste for innovation which he dedicates to the improvement of existing parts and to the design of new tools to make the use of existing devices safer and more effective. In the first half of the 1970s, these values are instilled in Pierre and Paul Petzl by their father. They will strongly mark the culture of the family business.
- 8 Sales keep progressing, but production remains limited to a maximum of 300 pulleys per year. However the beginning of the 1970s is marked by an important evolution in speleology techniques: the development of methods for ascent on a single rope. Members of the La-Tronche speleology group decide to adapt a device used by Americans to the pre-Alps limestone abysses. A technique of ascent on a single rope by means of a locking device is finalized and made known by the club members. At that point, speleology is booming; the number of club members has doubled over fifteen years, reaching 6.000 in 1973. This technical upheaval opens up a market because every follower now needs specific equipment.
- 9 Fernand Petzl, now sixty-two years old and concerned with the professional future of his sons, helps them to create *Petzl Ltd* in 1975 where both partners, Pierre and Paul, launch into a full-blown production of speleology equipment.
- 10 The revolution of speleological techniques is underway, but it still heavily relies on the diverted usage of existing materials like, for example, the Jumar handle which was developed by mountain guides for rescue operations. Petzl's good point is to quickly bring complete and adapted technical solutions through various innovations⁶. Until then, speleology devices were produced by clubs or individuals who created their own equipments manually and possibly sold them to other followers. However, within a few years, Petzl Ltd takes advantage of its strong links with the speleology community and becomes the main manufacturer of speleology equipment. Even though the company has competitors – and especially TSA for what regards belts or bags – tools for rope ascent are their own references.

- 11 At that time the company leaves the paternal workshop in Saint-Nazaire-les-Eymes and settles in premises seven times as large in Crolles, still in the Grenoble area. This moving is imperative because the Petzl family now has seven employees and their turnover has gone up to 500,000 French Francs. But this location is not simply connected to practical reasons: the site is symbolic because it is at the foot of the Dent de Crolles where all the speleological adventure began, and quite close to the Berger abyss which symbolizes great depths. Nevertheless the link with the speleology world is no longer exclusive; the company opens up to new activities offering excellent perspectives for development.

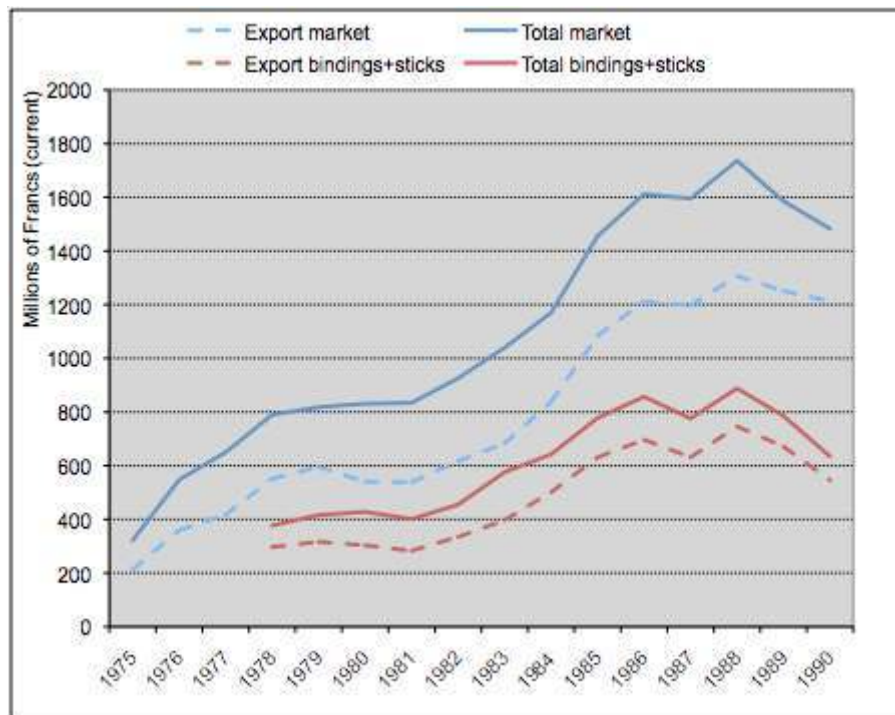
Beyond speleology: Paul Petzl diversifies on the mountain market

- 12 In the Petzl family, father and sons share many values, but their styles vary considerably where company management is concerned. Fernand Petzl had chosen to work alone, mainly to preserve his independence. Paul, his younger son, is very much involved into the development choices of the activity and his excellent eye for opportunities embarks the company into a sustainable growth, especially thanks to a diversification policy, a widening of the mountain activities spectrum. Paul Petzl's lucidity in these investment choices is also marked by his personal commitment in these activities. He is totally part of the craftsman model, this exemplary entrepreneur defined by F. Cognie and F. Aballéa (2010).

Petzl glides towards bindings for ski touring

- 13 Paul Petzl, who regularly practice ski touring that his father was not interested, launched the company in this market by developing a new type of fastener.

FIGURE 1. EVOLUTION OF FRENCH WINTER SPORTS EQUIPMENT PRODUCTION (IN THOUSANDS OF FRENCH FRANCS)



Source: FIFAS (sector survey, 1975-1990)

- 14 By positioning itself on this market, Petzl Ltd opens up to a vast potential business but it also has to face already established competitors. With this market, as opposed to speleology, Petzl can rely neither on the reputation attached to its name nor on a large network in ski circles. Hence the conquest of the market is only possible through classical ways in industrial competition. These strategies can be summarized into three scenarios: innovate to offer a better product; reduce production costs to propose a cheaper product; or look for an intermediate position aiming at obtaining the best possible value for money.
- 15 Following its leaders' family values, the Petzl company follows the first avenue, always stimulated by the improvement of existing tools. The newly-developed binding is a great innovation because it makes it possible to glide down on the skis in a slightly more forward position with the same comfort as with an Alpine skiing abutment. To penetrate the market, Petzl relies on targeted communications directed to ski touring followers, especially through the French Alpine Club magazine, focusing on safety and reliability: "In the safety race... Petzl arrives first!"⁷ or: "The safety instinct"⁸. As for competitors, even though they also use arguments focused on technical aspects, they remain more general and do not stress the safety aspects.

Light on the company flagship product: the headband lamp

- 16 The ski market is not the only one Petzl ventures into. The versatility of mountain equipments offers many opportunities. As speleologists are condemned to permanent darkness, lighting is of the utmost importance as to lesser extent climbers who often start before daybreak. The specifications are quite similar: quality of lighting, autonomy and

reliability in a cold and wet environment and if the French Federation of Speleology counts less than 6,000 followers in 1975, together the French Alpine Club and the French Federation of Mountain gather almost ten times more. As the distribution network is the same, selling to them does not require any more investment. As its competitors on the French market⁹ are not especially strong on this type of products, Petzl obtains a long-lasting success with the various users.

- 17 Twenty-five years later, the headband lamp market will extend even more. With the development of electro-luminescent diodes (LED) in 2000, lamps become simple, practical, light, economical and even attractive. Soon speleologists and climbers are successively joined by 5.7 million mountain hikers, 10.5 million other hikers and part of the 18 million cyclists who keep a spare lamp in their rucksack (INSEE, 2003). Non-sports usages also develop like for campers, but also for everyday life situations which require the use of a flashlight, so that the headband lamp market represents the largest part of the company receipts.
- 18 The development of the LED lamp is connected to a technological progress obtained outside of Petzl's and which ended up with the production of white light spectrums with diodes¹⁰. The technology transfer attracts many more users. The innovation is all the more important as it is the fruit of a technical evolution and at the same time an extension of the uses of existing equipment (Hillairet, Richard, Bouchet, 2009). However, it is necessary to underline that the success of the lamp with its initial target public soon made it possible to produce large series at very competitive prices. The relatively attractive price makes this technology more accessible and favours its distribution with even more customers (Hillairet, 2005). Since then, faced with a henceforth considerable market, Petzl has been threatened by many competitors (Black Diamond, Princeton, Frendo, Silva, etc.). Today, *Le Vieux Campeur* holds 41 references for headband lamps produced by six different manufacturers.

The ascent of the climbing market

- 19 Paul Petzl, as a well-informed administrator and as a follower of many mountain activities, engages the company in other projects. Without lingering over all the activities Petzl covers, it is important for us to go back over a decisive stage in the 1980s when the climbing market enjoys an accelerated growth (Aubel, 2002). Americans appear like pioneers in this activity and manufacturers naturally follow this development. The Chouinard company, which will become Black Diamond in 2001, begins its production with moorings intended to belay the climbers' progress. Troll is the harness specialist. At the beginning of the 1980s, the followers' requests stimulate innovation to adapt the traditional complete mountain harness to the specificities of free climbing. The design of that harness had not significantly evolved during the past decades. G. Marbach, the owner of TSA and a competitor of Petzl's on the speleology market, launch The "Presles" in 1984.
- 20 The same year, Petzl makes a timid arrival on the market but then, becoming aware of the scale of the market, decide a decisive plunge into this venture. The climbing market keeps growing with the development of artificial structures¹¹ which attract city people to this activity originally born in the mountain (Raspaud, 1991). To meet the many requests and guarantee the quality of equipments subjected to intense stress, Petzl invests in automatic machines to mechanize harness assembly. This step is also important in the

structuring of the company as it turns its craftsman activity into a partly industrialized one.

- 21 While the Petzl company is not historically connected to climbing, it becomes a major equipment manufacturer for the followers of this activity, especially because it continues to meet the users' needs through a range of products which complete the climber's outfit by improving its safety according to the company values. For example the "Grigri", a device for self-blocking belaying, was produced to replace the "Huit" which required the user's permanent attention. Then betting on the growing use of polystyrene froths, Petzl Ltd campaigns for helmet wearing. When karabiners and various other accessories are made available by Petzl, climbers can be fully equipped with the brand products.
- 22 When Paul Petzl took over the company management, his approach aimed at conquering new markets. First, this diversification¹² is due to the limited character of the speleology market and to the opportunities which the increasingly emerging activities represent. This dynamics is made possible by the versatility of certain equipments like the headband lamps which allow the company to rely on its own skills. But commercial success is also connected to the harmony between the company values and the evolutions of the market: the search for quality and safety which has always led Petzl to designing new products meets with a public who tries to reduce risk-taking to its minimum. Finally, efforts in innovation enable Petzl to position itself quickly with new products which sometimes manage to get ahead of its competitors. However the company sustainability is also closely related to its choices in strategy and management. Petzl's investment in the production of climbing harnesses and other associated equipments as well as the success of climbing contrast with the evolution of the ski market. After slowing down its growth in the middle of 1980s, skiing is now clearly declining (figure 1). So, considering the continuing enthusiasm for climbing, Paul Petzl decides to give up the production of ski touring bindings. Other management choices linked to the inside organization of the company have ensured the prosperity of the activity.

From the family workshop to an international company

- 23 In France, the production of equipment for sports and leisure activities was mainly based on a craftsman model up to the 1960s (Andreff, 2002). The partly industrialized production and the development of automated assembly lines make it possible to meet much larger demands. Indeed, this period corresponds to an unprecedented democratization movement in sports practices, including winter sports, thus entailing an increasing need for specific equipment. But beyond the narrow link binding manufacturers to consumers, the industrial production mode is part of a wider economic logic which specialists in sporting goods cannot escape. This is the reason why, even though Petzl Ltd has enjoyed a relatively regular and continuous growth since its creation, it is important to analyze the strategies implemented to face the transformations affecting industry and more specifically in the field of sporting goods: mergers and acquisitions, relocation of production sites and race for innovation (Bouchet, Hillairet, 2009).

An independent company with a powerful identity

- 24 Since the 1980s large industrial groups built on a merger and acquisition policy appear in the industry of sporting goods. This agitated history depicts the economic context, but it is widely different from the way Petzl developed. Indeed to this day the company remains the exclusive property of the family members and Paul Petzl intends to maintain this position. He declared he had declined every bid that had been made to him. In this way, he can keep the control of his company where he continues to cultivate certain values.
- 25 This determined will for independence is both the expression of the Petzl family values cultivated within the company and of Paul Petzl's wish to keep control over its activities. On the other hand, the company engaged in two acquisitions which allowed it to strengthen its position on the. In both cases, the acquired companies had been put on sale by their respective owners within the framework of a transfer of activity for one, and a refocusing of the activity for the other. Nevertheless Petzl was strengthened by these acquisitions having thus enriched its product range and gained new market shares.
- 26 The first acquisition goes back to December 1997 when TSA, a local company owned by G. Marbach is sold to Petzl. After the acquisition, Petzl maintains the TSA products in speleology and canyoning, but immediately eliminates every competitive climbing product. Petzl's acquisition has contributed to giving the brand an even more hegemonic position on the market of speleology and to eliminating one of its main competitors in climbing equipment. This way of conducting things will be repeated in a similar way during the second operation.
- 27 Charlet-Moser is a company specialized in climbing equipment, in particular technical materials like ice axes and crampons. In 1983 it is bought back by Leborgne, a company which revitalizes its activity by proposing ice axes with a bent handle adapted to a practice which is becoming more and more popular: ice climbing. In 2000, Leborgne wishes to part from it in order to refocus its activity on its main business line: garden equipment¹³. Petzl is perfectly indicated to make this deal. With its turnover of 30.5 million Euros and its 200 employees, Petzl is now almost ten times as large as Leborgne and can easily realize this operation without great risks. Furthermore, Petzl and Charlet-Moser have numerous distributors in common to whom they offer complementary ranges linked to "vertical" activities. By purchasing the company, Petzl completes its own product range and can now offer complete equipments to mountain climbers and ice climbers. It is quite possible that the geographical proximity of the companies facilitated the exchanges. The strong presence of sporting goods manufacturers in the Rhone-Alps area¹⁴ is closely related to the nearness of the sites of practice and contributes to the evolution of the sector¹⁵. But the fact that the acquired companies were geographically close together should not hide the international character of Petzl's activity.

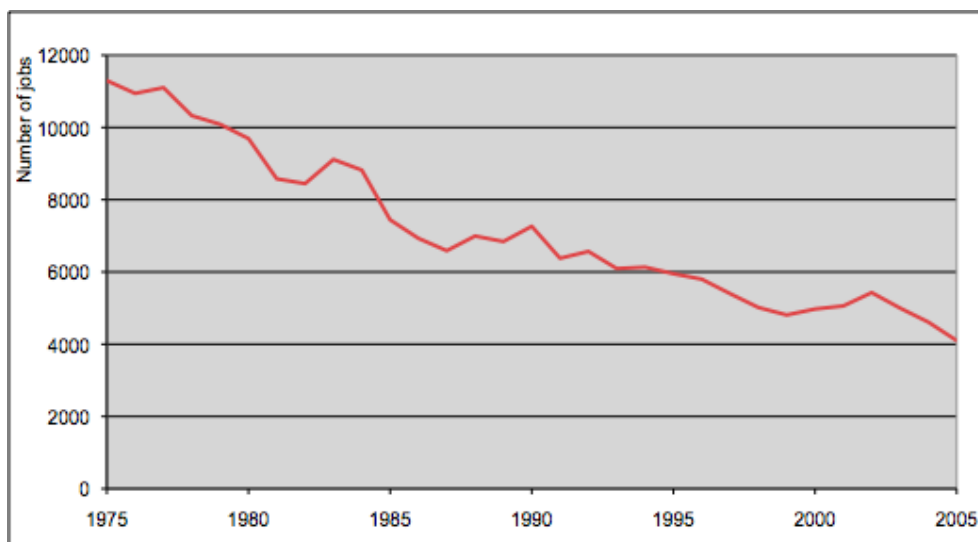
Petzl and globalization

- 28 From the start Petzl Ltd has had foreign customers. We have mentioned how speleologists used to visit Fernand Petzl early in his career. Going beyond these occasional purchases, Paul Petzl looks for distributors, especially abroad. Originally France was quite famous for its winter sports equipment and more than three-quarters of the national production was exported (Figure 1). Therefore the Petzl brand was soon distributed abroad, first in

neighboring European countries and then in the United States. Over the years, this network got wider and it now includes fifty countries. This investment allows Petzl to have a definite international dimension and to realize 80% of its turnover in its foreign sales. Distribution is a very important point in the company strategy and its development. Petzl creates its own distribution network in France, especially with the help of mountain guides who can be economical seasonal commercial workers.

- 29 The same disappearance of an intermediary in the distribution network takes place on the American market. Paul Petzl creates a branch company in Salt Lake City in 1998¹⁶, situated at the foot of the Rocky Mountains, where many companies or subsidiaries specialized in sporting goods is already established¹⁷.
- 30 Now companies established in countries where production costs are high more and more often resort to foreign subcontractors. Thus Petzl's competitors soon implement a functioning mode that has become common practice in industry: relocation of the production sites in countries where the workforce is less expensive. This phenomenon is the rule in the whole industrial sector of sporting goods (Andreff, 2002). It reduces the products cost price. In return, this dynamics inevitably tends to reduce the number of industrial jobs as in France (Figure 2). In the end, either prices decrease or sales margins increase.

FIGURE 2. EVOLUTION OF EMPLOYMENT IN THE MANUFACTURING OF SPORTS AND CAMPING ARTICLES IN FRANCE FROM 1975 TO 2005



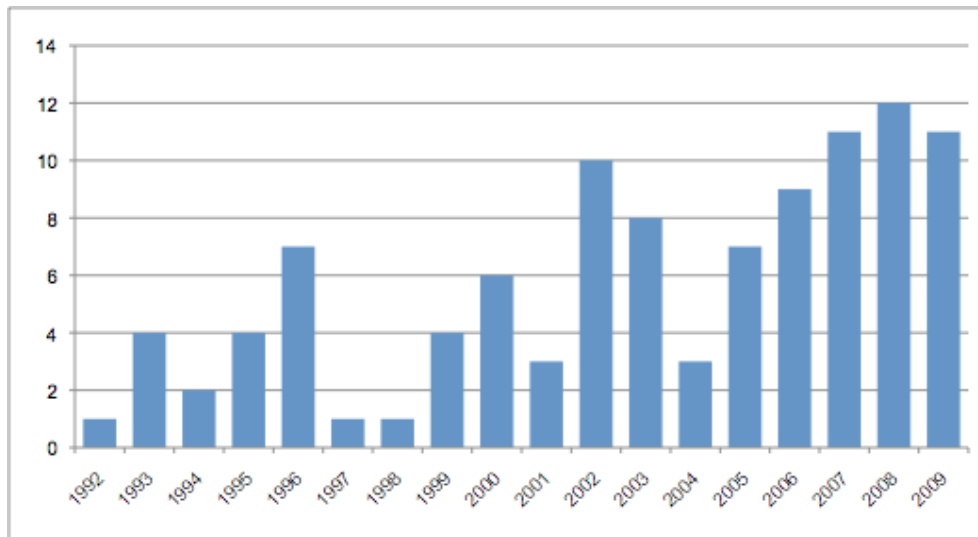
SOURCE: FIFAS (SECTOR SURVEY, 1975-1990)

- 31 According to Paul Petzl, the Aubry laws voting in 1998 a 35 hour working week in France persuade him to give a larger place to production abroad. But this decision is hard to implement considering the company values and its social policy. Relocation and lay-offs always have a disastrous impact on the image of a highly profitable company. But a justifiable solution takes shape when increased sales come to require further production: this will be mainly manufactured in countries where the workforce is economical. Relying more and more on a network of subcontractors, Petzl eventually establishes a production site in Malaysia in 2009. The site employs 38 people¹⁸ out of the company's 450 employees. In this way, Petzl maintains all the existing jobs in France, including in its production sites, and manages to perpetuate its activity without compromising its image or values.

The evolution of the production structure helped these initiatives. Innovations in the field of electronics – and especially the LED headband lamps marketed from 2000 onward – facilitate the massive use of foreign subcontractors as the French production units are not oriented in this type of equipment: the Crolles site is clearly dedicated to R&D and to the company management whereas the Eybens production site is mainly oriented in the assembly of textile products and bauds in particular.

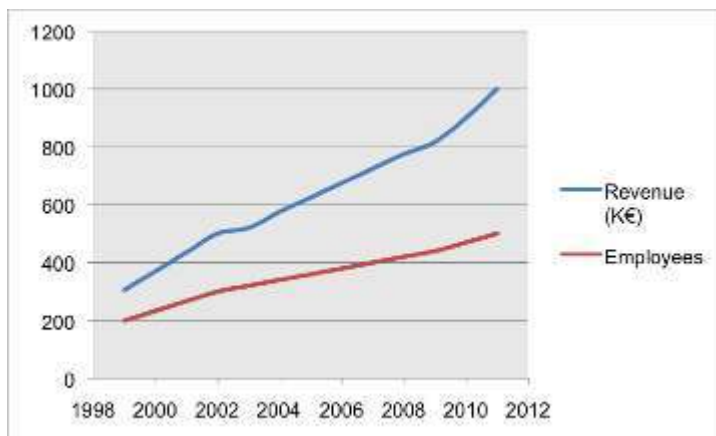
Innovation: a family tradition and a perspective for the future

- 32 The last driving axis of Petzl's economic dynamism is related to innovation. Some examples mentioned above testify of important advances linked to the family personal practice of mountain sports. W. Andreff (2002, 93) says about innovation that it is a "particularly strategic weapon in the industry of sporting goods, considering the permanent race for performance". This type of technical innovation is tangible in the design of material for rope ascent in speleology. But Petzl also plays on another front: outdoor sports which can also be practiced as leisure activities where performance is secondary. W. Andreff (2002, 94) completes his comment by reminding that one should not neglect "a request for innovations facilitating the practice of a sport for all followers, a request for greater safety and comfort". The Petzl family culture was always decidedly oriented towards innovation and this remains the driving element of the company business development. Despite the constraints linked to managing and directing the company, Paul Petzl remains fundamentally motivated by the conception and design of new products. His name appears among the inventors for 96% of the patents listed at the INPI and he is the only inventor for ten of them.
- 33 In this dynamics, the Research and Development center of the company, created in 1986 and associated with a trial tower, is the nerve centre of the activity. The first engineer is recruited that same year. About 90 persons are working there today. Investing in innovation, Petzl improves its products and multiplies its equipments. The patent registration bears witness to this accelerated dynamics (Figure 3). The innovations they can generate allow Petzl to maintain higher average prices. But this advantage is limited in time because business intelligence between companies in the sector entails very fast reactions from competitors.

FIGURE 3. PETZL PATENTS

SOURCE: INPI

- 34 The company managing strategy enables an efficient running of its development as well as the preservation of its identity and unity. In this way, the activity is long-lasting: the turnover and the number of employees keep increasing regularly over the years (Figure 4).

FIGURE 4. EVOLUTION OF TURNOVER AND NUMBER OF PETZL EMPLOYEES

SOURCES: SPECIALIST PUBLICATIONS, COMMERCIAL COURT

Conclusion

- 35 This reconstruction of Paul Petzl's course shows that his father's craft company managed to pass on its values: personal involvement, independence, innovation focused on quality and safety, while moving to an industrial organization.
- 36 Paul Petzl takes the lead of the company created with his brother to pursue and develop the work initiated by their father. He knows how to maintain the craftsman's virtues while engaging the company in a continuous growth policy. Along the way his choices are

guided by inherited values and reasoned options which ensure the company sustainability. Petzl Ltd widens its market by opening up to various types of climbing, relying on the know-how acquired with speleology and the equipment common to various mountain activities, and then completes its product range to offer full and adapted solutions to a constantly developing custom. Paul Petzl's management privileges investments, particularly in R&D to favour innovation, but it also remains centered on its own skills, its culture and its identity.

- 37 Paul Petzl manages to reconcile various strategic choices which lead the company to a continuous growth, thus allowing it to acquire an important position on the world market. Simultaneously, he maintains the spirit of a craft company despite the scale of the activity (500 employees and 100 million Euros' turnover).
- 38 Petzl Ltd has been running for about forty years under the authority of the same person, the depository of many values. It looks as if this factor brings constancy to the work realized. Thus it may be interesting for the small and middle-size companies of the sports sector to make a prosopographic analysis of their managers to get a better perspective on business orientations and management choices.

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Entretiens

Paul Petzl, président de Petzl, le 24.08.2011 à Crolles (38).

Jacques de Rorthays, président directeur général du Vieux Campeur, le 30.09.2011 à Massy (92).

Georges Marbach, ancien fabricant (TSA) et distributeur (Expe) de matériel de montagne, le 28.11.2011 à Choranche (38).

Michel Letrône, directeur de la commission de stages puis de l'École Française de Spéléologie au sein de la Fédération Française de Spéléologie, le 07.02.2002 à Villeurbanne (69).

NOTES

1. I would like to thank all the people who were kind enough to help me in this research, and especially those who granted me some of their precious working time: Paul Petzl, Francine Del Rieu, Jacques de Rorthays, Georges Marbach and Catherine Trachtenberg.
2. Summer and winter catalogs (1970-2010) of *Le Vieux Campeur*, a specialized retailer known for the wide range of products he distributes allow to analyze the development of the products and ranges sold by Petzl.
3. Essentially the quarterly magazines of the French Federation of Speleology, *Spelunca*, and of the French Alpine Club, *La Montagne et alpinisme*, between 1970 and 2010.
4. Following up the evolution of the turnover and the number of employees in the company on the whole period was complicated by the fact that Petzl refuse to be systematically submitted to declaration rules. These blanks were partially filled in by press reviews.
5. *Vieux campeur* catalogue, summer 1970.
6. A Petzl ad appeared in 1976 in *Spelunca*, the French Federation of Speleology magazine, showing a character progressing underground completely equipped with Petzl material: handle, lap blockers, stirrup, complete belt, lighting, helmet, overalls and bag.
7. *La Montagne et alpinisme*, n°3, 1982.
8. *La Montagne et alpinisme*, n°1, 1986.

9. From the 1970s till the end of the 1990s, various brands appear but do not last, including non-specialized ones like Panasonic or Wonder. Only Frendo will remain in the field from the 1990s onward.
 10. After the first analyses made by the Russian technician O. Vladimirovich Losev at the end of the 1920s, the first luminescent electro diode (LED) light up in 1962 thanks to the work of N. Holonyak. In 1990, Professor Shuji Nakamura develops a blue spectrum LED; this will then be improved to obtain a very bright white spectrum which has numerous applications.
 11. 21 artificial structures were listed in 1980, about 600 in 1989 and more than 2,500 in 2012.
 12. We should also mention the development of the company on the work market – first-aid workers, aligners, pruners, servicemen, semi-skilled workers operating at high altitudes, etc. – because even though the frame of the present study makes us center on the sport and leisure activities market, that was the main diversification action of the company during the 1990s. Although it is a much more modest actor on this wider market than on the sport one, today this extension of its sphere of action brings in half of its turnover.
 13. In 2000, Charlet-Moser has a turnover of 3.8 million Euros and profits exceeding 350,000 Euros for a staff size of twenty-eight people.
 14. *Panorama de l'économie Rhone-Alps*. Park of activity and skills, "The industries of sports and leisure activities", Rhone-Alps Chambers of Commerce and Industry, 2007.
 15. Sporaltec, a division related to competitiveness, was created in the Rhone-Alps area to take advantage of the density of the companies present in the region and improve their performances.
 16. Wharton T.: "Petzl's Fortunes Keep Climbing", *The Salt Lake Tribune*, August 15, 2001.
 17. "Outdoor products companies announce investment in Utah", *US Fed News*, January 29, 2007.
 18. *L'Entreprise*, n°296, January 2011.
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ABSTRACTS

Petzl is a company located in the Grenoble region, in the northern French Alps. Its activity is centred on the production of equipment for mountain sports. Today, the company is an eminent international PMI (small and medium-sized industry) in the industry of sports items, carrying a range of products such as frontal lamps, climbing harnesses and mechanical machines securing rope ascents. It used to be a simple family business offering traditionally-made articles for speleology. The present monograph shows the evolution of its activity under the continued management of Paul Petzl. We hypothesize that the latter launched and perpetuated a growth dynamics thanks to the cultivation of the craftsmanship and values inherited from his father's company: quality design and total dedication to the users' safety. The development of the company is mainly established on diversifying its production from speleology to skiing, hiking, climbing, and various other mountain sports which became popular along the years. The success of the company expanding market is due to its capacity to innovate and to offer equipments better adapted to the followers' needs, especially with regard to safety, a value which transcends all practices and which is the highlight of the company's identity.

INDEX

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